Claims:

1-15. (Cancelled).

- 16. (previously presented) The method as claimed in claim 18, wherein the switchover is performed in a jolt-free manner such that a portion of the data residing in the common memory area of the reflective memory unit is immediately processed by the standby automation device as the current status image of the technical device and the automation system.
 - 17. (Cancelled).
- 18. (previously presented) A method for operating a redundant automation system for controlling a technical device, comprising:

operating a first automation device as a master;

operating a second automation device as a standby;

storing status data of the first and second automation devices in a reflective memory unit wherein a common memory area of the reflective memory unit can be written to and read from both said first and said second automation devices, wherein the data present in the common memory area is available in parallel and in real time to the automation devices;

sensing, with the use of a monitoring module operatively coupled to both said first and said second automation devices, for the presence of a vital sign from said first automation device for a change and when no change is sensed during a given cycle of operation, then making a switchover to the standby automation device that takes over the function of the former master automation device; and,

wherein there is present in the common memory area of the reflective memory unit status data which describes the current operating status of the technical device and the automation system immediately before a technical device error occurs in the master automation device.